10/634,213

Filed

:

August 5, 2003

AMENDMENTS TO THE CLAIMS

The specific changes to the amended claims are shown by double brackets or strikethroughs for any deletions and underlining for any insertions. Please cancel Claims 1-4, 10, 13-14, 33-34 and 40-51, amend Claims 5, 12 and 32, and add Claims 53-59 as follows:

- 1. (Canceled)
- 2. (Canceled)
- 3. (Canceled)
- 4. (Canceled)
- 5. (Currently Amended) An instrument for delivering implants for treating an ophthalmic condition and dispensing implants through a wall of Schlemm's canal, the instrument comprising:

an elongate body, said elongate body <u>comprising a tube and</u> sized to be introduced into an eye through an incision in the eye;

a trocar in said tube, wherein said trocar has a cutting edge sufficiently sharp to cut through said wall of Schlemm's canal, but not so sharp as to significantly damage a scleral wall of Schlemm's canal;

a plurality of biocompatible implants positioned in the elongate body, each of said implants sized and shaped to convey aqueous humor from the anterior chamber to a fluid outflow path of the eye so as to reduce elevated intraocular pressure; and

said elongate body further comprising an actuator that serially dispenses the implants from the elongate body for implanting in eye tissue.

- 6. (Original) The instrument of Claim 5, wherein the elongate body comprises a tube.
- 7. (Original) The instrument of Claim 5, wherein the implants are positioned end to end in the tube.
- 8. (Original) The instrument of Claim 5, wherein the body comprises a cutting member.
- 9. (**Previously Presented**) The instrument of Claim 8, wherein the body comprises a tube and the cutting member comprises an end of the tube.

: 10/634,213

Filed

August 5, 2003

10. (Canceled)

:

- 11. (**Original**) The instrument of Claim 10, wherein the implants have respective lumens and the trocar passes through the lumens.
- 12. (Currently Amended) The instrument of Claim—10_5, wherein the instrument dispenses the implants through a wall-of Schlemm's canal, said trocar having has a cutting edge sufficiently sharp to cut through said wall of Schlemm's canal, but not so sharp as to significantly damage a scleral wall of Schlemm's canal.
 - 13. (Canceled)
 - 14. (Canceled)
- 15. (Previously Presented) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

providing a plurality of biocompatible implants that, when implanted, convey aqueous humor from the anterior chamber to a fluid outflow path of the eye so as to reduce intraocular pressure;

utilizing said instrument to deliver a first biocompatible implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second biocompatible implant through a wall of Schlemm's canal at a second location, without removing said instrument from the eye between said deliveries of said implants.

- 16. (Original) The method of Claim 15, further comprising determining said locations with reference to morphological data on collector channel locations.
- 17. (Original) The method of Claim 15, wherein the incision is a superiorly located limbal incision.
- 18. (**Original**) The method of Claim 17, wherein the incision is between 10 o'clock and 2 o'clock.
- 19. (Original) The method of Claim 15, further comprising performing cataract surgery through said incision.
- 20. (Original) The method of Claim 15, further comprising determining said locations by imaging collector channel locations.

Appl. No. : 10/634,213 Filed : August 5, 2003

21. (**Original**) The method of Claim 15, wherein said implants are delivered through a trabecular meshwork of said eye.

- 22. (**Original**) The method of Claim 15, wherein said locations are angularly spaced along Schlemm's canal by at least 20 degrees.
- 23. (**Original**) The method of Claim 15, wherein the first and second locations are substantially at collector channels.
- 24. (Original) The method of Claim 15, wherein said implants have different flow characteristics.
- 25. (**Original**) The method of Claim 15, wherein one of said first and second locations is nasal and the other of said first and second locations is temporal.
- 26. (**Previously Presented**) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first biocompatible implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second biocompatible implant through a wall of Schlemm's canal at a second location;

wherein said locations are determined from morphological data on a collector channel.

27. (**Original**) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said locations are determined by imaging collector channel locations.

28. (Original) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

: 10/634,213

Filed

: August 5, 2003

utilizing said instrument to deliver a first implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second implant through a wall of Schlemm's canal at a second location;

wherein said locations are angularly spaced along Schlemm's canal by at least 20 degrees.

29. (Previously Presented) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first biocompatible implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second biocompatible implant through a wall of Schlemm's canal at a second location;

wherein the first and second locations are substantially at collector channels.

30. (Previously Presented) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

utilizing said instrument to deliver a first biocompatible implant through a wall of Schlemm's canal at a first location; and

utilizing said instrument to deliver a second biocompatible implant through a wall of Schlemm's canal at a second location;

wherein said implants have different flow characteristics.

31. (Previously Presented) A method of implanting a plurality of implants for treating glaucoma, comprising:

inserting an instrument into an eye through an incision;

positioning said instrument at a first location and utilizing said instrument to deliver a first implant into the posterior segment of the eye at said first location; and

moving said instrument to a second location and utilizing said instrument to deliver a second implant into the posterior segment of the eye at the second location, without removing said instrument from the eye between said deliveries of said implants.

10/634,213

:

Filed

August 5, 2003

32. (Currently Amended) A method of treating an eye condition, the method comprising:

making an incision into a naturally-occurring space of an eye;

inserting an instrument through the incision; and

serially dispensing a plurality of preloaded implants from an-the instrument into eye tissue at a respective plurality of locations within the eye, said dispensing comprising moving the instrument a respective plurality of times without removing the instrument from the incision.

- 33. (Canceled)
- 34. (Canceled)
- 35. (Previously presented) The method of Claim 15, wherein at least one of said first and second locations is at a collector channel.
- 36. (Previously presented) The method of Claim 26, wherein at least one of said firstand second locations is at a collector channel.
 - 37. (Previously presented) The method of Claim 27, wherein at least one of said first and second locations is at a collector channel.
 - 38. (Previously presented) The method of Claim 28, wherein at least one of said first and second locations is at a collector channel.
 - 39. (Previously presented) The method of Claim 30, wherein at least one of said first and second locations is at a collector channel.
 - 40. (Canceled)
 - 41. (Canceled)
 - 42. (Canceled)
 - 43. (Canceled)
 - 44. (Canceled)
 - 45. (Canceled)
 - 46. (Canceled)
 - 47. (Canceled)
 - 48. (Canceled)
 - 49. (Canceled)

: 10/634,213

Filed

August 5, 2003

50. (Canceled)

:

- 51. (Canceled)
- 52. (Previously Presented) A method of treating glaucoma, comprising:

providing first and second biocompatible implants that, when implanted, convey aqueous humor from the anterior chamber to a fluid outflow path of the eye so as to reduce intraocular pressure;

implanting said first biocompatible implant in tissue at a first location to convey said aqueous humor and reduce intraocular eye pressure; and

implanting said second biocompatible implant in tissue at a second location to convey said aqueous humor and reduce intraocular eye pressure, said first and second locations being selected such that implanting the second implant significantly reduces the intraocular eye pressure relative to the reduction achieved by implanting only the first implant.

53. (New) An instrument for delivering implants for treating an ophthalmic condition and dispensing implants through a wall of Schlemm's canal, the instrument comprising:

an elongate body, said elongate body sized to be introduced into an eye through an incision in the eye;

a plurality of biocompatible implants positioned in the elongate body, each of said implants sized and shaped to convey aqueous humor from the anterior chamber to a fluid outflow path of the eye so as to reduce elevated intraocular pressure; and

said elongate body further comprising an actuator that serially dispenses the implants from the elongate body for implanting in eye tissue

wherein at least one of said implants comprises a cutting member.

- 54. (New) The instrument of Claim 53, wherein the cutting member has a cutting edge sufficiently sharp to cut through said wall of Schlemm's canal, but not so sharp as to significantly damage a scleral wall of Schlemm's canal.
- 55. (New) The instrument of Claim 53, wherein the implants are positioned end to end in the tube.
 - 56. (New) The instrument of Claim 53, wherein the body comprises a tube.

Appl. No. : 10/634,213 Filed : August 5, 2003

57. (New) The instrument of Claim 53, wherein the cutting member comprises an end of at least one of said implants.

- 58. (New) The instrument of Claim 55, wherein the instrument further comprises a trocar in the tube.
- 59. (New) The instrument of Claim 58, wherein the implants have respective lumens and the trocar passes through the lumens.
- 60. (New) An instrument for delivering implants for treating an ophthalmic condition and dispensing implants through a wall of Schlemm's canal, the instrument comprising:

an elongate body, said elongate body comprising a tube and being sized to be introduced into an eye through an incision in the eye;

a trocar being disposed within and being axially moveable through said tube, wherein said trocar has a cutting edge sufficiently sharp to cut through said wall of Schlemm's canal;

a plurality of biocompatible implants positioned in the elongate body, each of said implants sized and shaped to convey aqueous humor from the anterior chamber to a fluid outflow path of the eye so as to reduce elevated intraocular pressure; and

said elongate body further comprising an actuator that serially dispenses the implants from the elongate body for implanting in eye tissue.